

SVETLANA TECHNICAL DATA

EL509/6KG6

High Performance Beam Power Tetrode

he Svetlana EL509/6KG6 is a beam power tetrode intended for use in class A, AB or B audio amplifiers and for class B or C RF amplification. Close manufacturing specification tolerances and improved high voltage processing provides improved reliability and superior performance.

The Svetlana EL509/6KG6 features:
Increased peak cathode emission from new cathode materials; Stable operation from extended processing and aging; Gold-plated grid; Precise grid/screen alignment; Extra-heavy glass envelope for ruggedness; Improved vacuum processing; Comprehensive testing before and after aging.

The Svetlana EL509/6KG6 is manufactured in Russia at the Svetlana factory and is designed to be a direct replacement for any 6KG6 or EL509. The strict manufacturing and quality controls at the Svetlana plant assure functionality and long life.

Characteristics

Electrical

Heater:	min	nom	max	
Voltage (AC or DC)	5.7	6.3	6.9	V
Current @6.3 volts		2.5		A
Transconductance (nominal)			18,000	µS
Plate resistance (nominal)			8000	ohms
Interelectrode capacitances (typical):				
Grid to plate			2.5	pF
Grid to cathode			25	pF

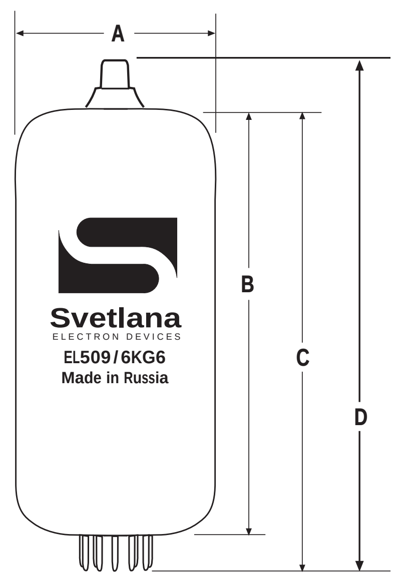
Mechanical

Cooling	Radiation and convection
Base	Nine pin magnoval, glass button
Basing diagram	JEDEC 9RJ
Socket	Svetlana SK509 or equivalent
Anode connector	1/4" plate clip, standard sweep tube type
Operation position	Axis vertical, base down or horizontal
Nominal dimensions:	
Diameter	45.6mm (1.75 in)
Base to top of envelope	96.6 mm (3.81 in)
Overall height (not including plate cap)	105.3 mm (4.145 in)
Overall height (including plate cap)	117.9 mm (4.641 in)
Net weight	110 gm

Maximum Ratings

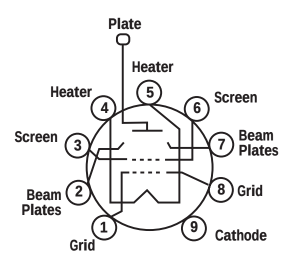
DC plate voltage	900	V
DC plate voltage, pulsed	8000	V
DC cathode current	500	mA
DC screen grid voltage	300	V
Screen dissipation	7	W
Plate dissipation	35	W

Svetlana Outline drawing



Dimensional Data

Dim.	Millimeters	Inches
A	45.6	1.75
B	96.6	3.81
C	105.3	4.145
D	117.9	4.641



Svetlana
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Typical Operation, Class A1, Audio Amplifier (single tube)

Plate voltage	*500*	*V*
Screen voltage	*280*	*V*
Grid no.1 voltage	*-82*	*V*
Peak grid drive	*50*	*Vp-p*
Plate current, no signal	*70*	*mA*
Plate current, max signal	*100*	*mA*
Effective load resistance	*1650*	*ohms*
Distortion at 1 watt into 8 ohms	*0.9*	*%*
Power output at 5% distortion	*14*	*W*

